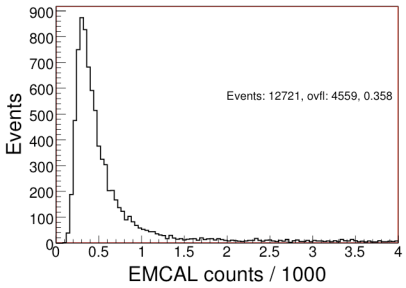
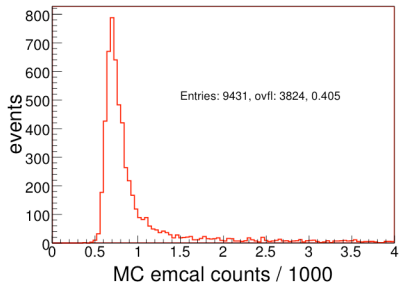
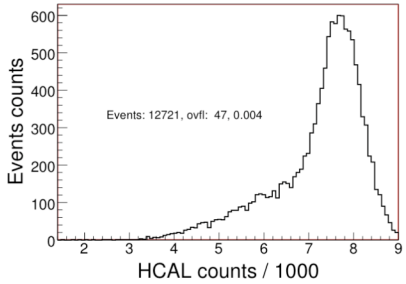
EMCAL ADC counts

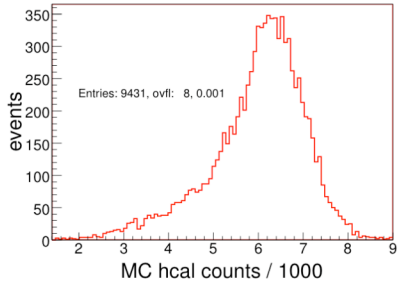




EMCAL ADC counts as a response for the protons. MC counts is higher by factor 2.

HCAL ADC counts





HCAL ADC counts as response for the protons. MC counts is lower by 20% and wider than data.

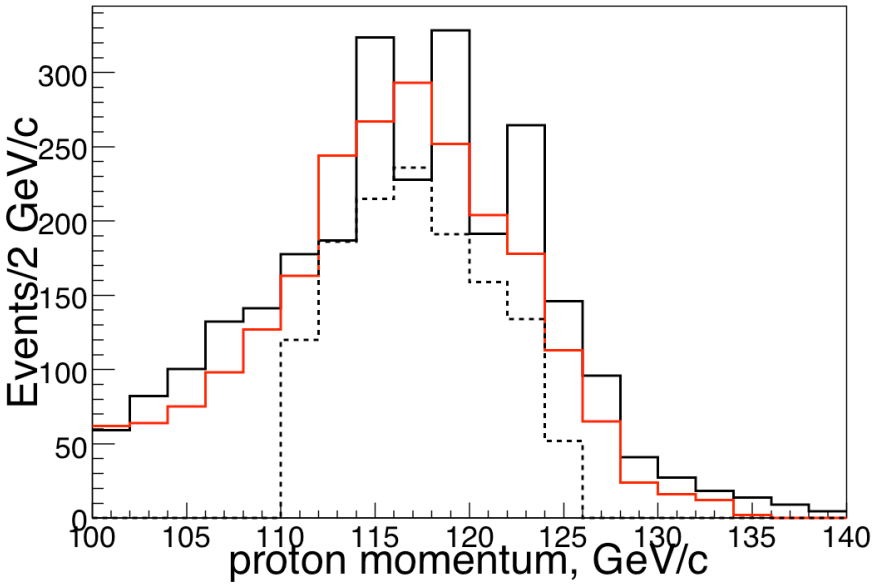
- Turgun showed that the EMCal MC was *higher* than data by a factor of 2 while the HCal MC was *lower* by 20% and also wider.
- I have accordingly tuned the MC gains. I have also taken out a “smearing” factor I had in for HCal MC.

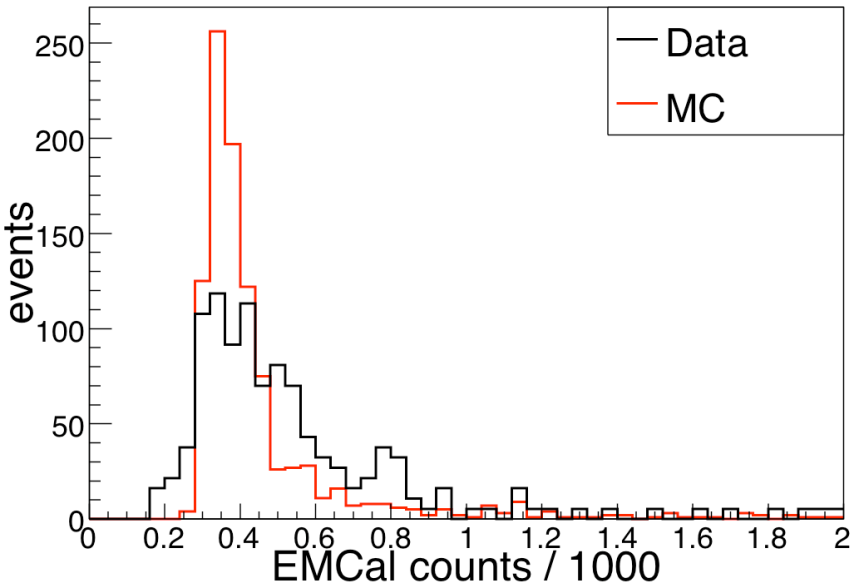
- Selecting single track evts with 110 < p < 125 GeV
- Requiring a single shower in the EMCal

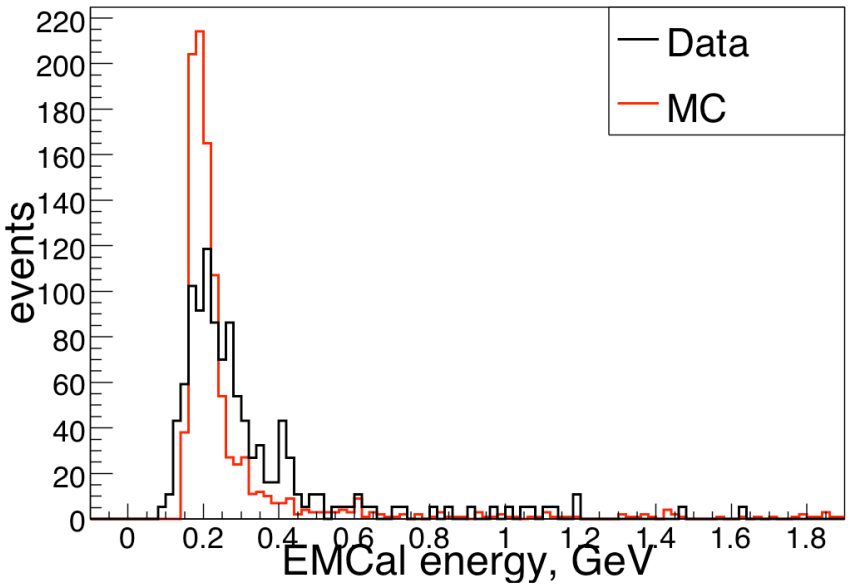
- **Right**: Momentum distribution for data (black) and MC (red)

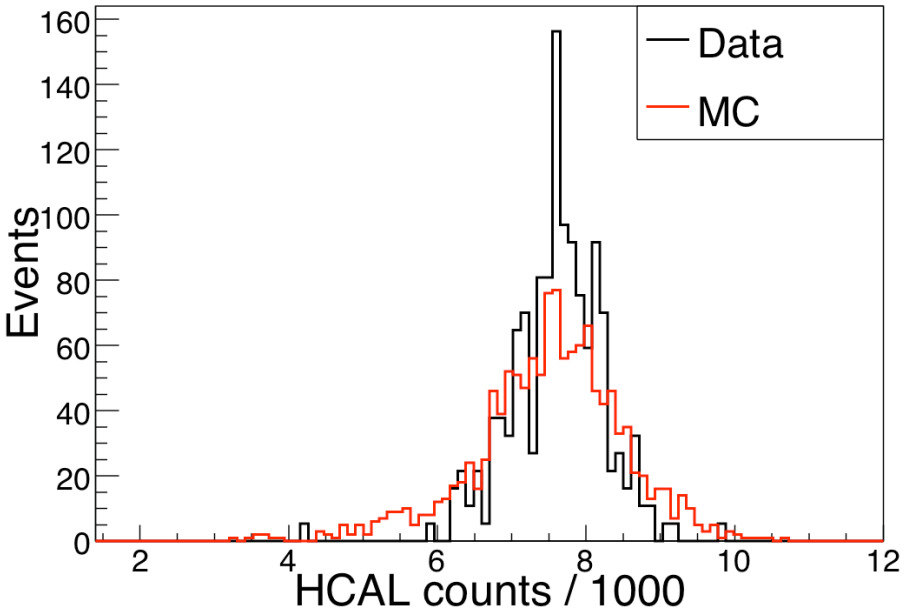
- **Bot Left:** EMCal ADC,
  Bot Right: Calibrated EMCal Energy

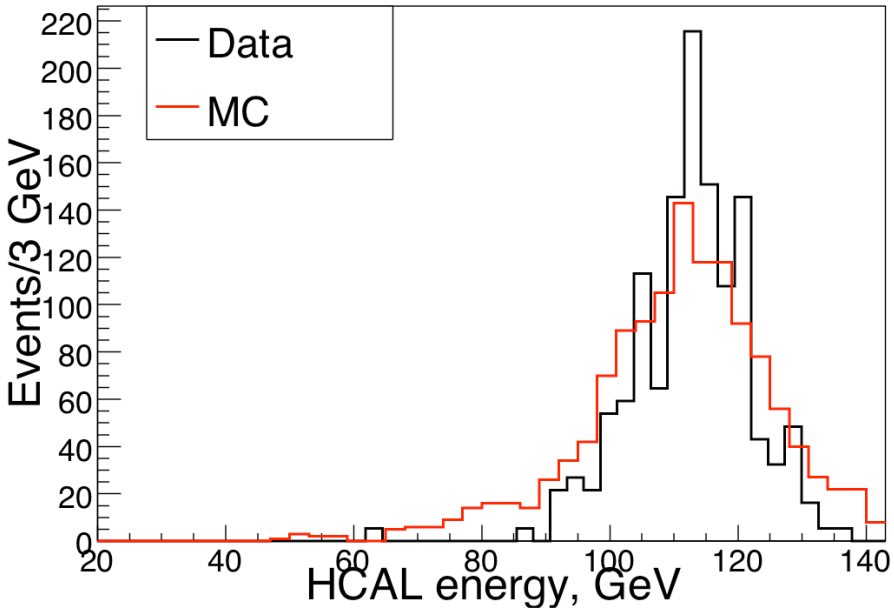
- EMCal "means" now agree; MC is still narrower than data.











- Left: HCal ADC, Right: Calibrated HCal energy
- Again the means agree now, but the HCal MC seems a little wider than the data.
- Other changes made - fixes to EMCalReco:
  - do not do ADC corrections (electronics) if MC
  - do not add wire offsets if MC (affects track-shower matching)